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APPLICATION N	10.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,295		06/29/2001	William J. Boyle	ACS-56001 (26361)	1994
24201	7590	09/11/2006		EXAMINER	
	DER PAT		MITCHELL, TEENA KAY		
6060 CEN 10TH FL	NTER DRI OOR	VE	•	ART UNIT	PAPER NUMBER
	GELES, C	A 90045		3743	
				DATE MAILED: 09/11/2004	6

Please find below and/or attached an Office communication concerning this application or proceeding.

			( )
	Application No.	Applicant(s)	
	09/897,295	BOYLE ET AL.	
Office Action Summary	Examiner	Art Unit	
	Teena Mitchell	3743	
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPUBLICHEVER IS LONGER, FROM THE MAILING IF Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory perioder in the provision of the	DATE OF THIS COMMUNI.  .136(a). In no event, however, may a d will apply and will expire SIX (6) MO tte, cause the application to become A	ICATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on 19.     2a)⊠ This action is FINAL. 2b)□ Th     3)□ Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal mat	•	its is
Disposition of Claims			
4) ☐ Claim(s) 3-32 and 41-51 is/are pending in the 4a) Of the above claim(s) 14-19 and 27-32 is/ 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 3-13,20-26,41-51 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	are withdrawn from consid	eration.	
Application Papers			
9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) according an according to a specific and any not request that any objection to the Replacement drawing sheet(s) including the correction of the specific and the spec	ccepted or b) objected to e drawing(s) be held in abeya ection is required if the drawing	nnce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.1	
Priority under 35 U.S.C. § 119			
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documer  2. ☐ Certified copies of the priority documer  3. ☐ Copies of the certified copies of the priority application from the International Bure  * See the attached detailed Office action for a list	nts have been received. nts have been received in a iority documents have been au (PCT Rule 17.2(a)).	Application No n received in this National Stage	e
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application	
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	6) Other:		

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-13, 20-26, 41-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of "...non-woven reinforcing member..." which was not previously presented in the originally filed specification constitutes new matter.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3-13, 20-26, and 41-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins et.al. (6,544,279) in view of Amplatz (6,123,715) and Kelley (6,517,765).

Hopkins in a restraining device discloses a restraining sheath having an expandable housing portion (594) adapted to receive and maintain the self-expanding medical device (588) in a collapsed condition on the delivery device, the expandable housing portion being adapted to move between a contracted position (Fig. 23A) and an expanded position (Fig. 23B), the housing portion having sufficient column strength to maintain the self-expanding medical device (588) in its collapsed condition on its delivery device, wherein the expandable housing portion (594) is made primarily from an elastic material which is movable between the contracted position and expanded position. With respect to the limitation of the reinforcing member being non-woven, Hopkins does not teach a non-woven. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the reinforcing member be a non-woven, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design consideration. Applicant has not disclosed that having the reinforcing member being a non-woven provides an advantage, is used for a particular purpose, or solves any stated problem. One of ordinary skill in the art furthermore would have expected Applicant's invention to perform equally well with other materials, which provide elastic properties because the housing portion would still be able to expand. Therefore, it would have been an obvious matter of design consideration to modify Hopkins/Amplatz

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to obtain the invention as specified in claim 3 with the reinforcing member being a non-

woven

The difference between Hopkins and claim 3 is a reinforcing member associated therewith which provides additional column strength to the housing portion but does not interfere with the expansion or contraction of the housing portion.

Amplatz in an intravascular occlusion device teaches the use of tubular braids in medical devices providing reinforcing means to the wall of a guiding catheter, which may be adjusted as desired for a particular application by the pitch and pick of the fabric (Col. 3, lines 39-57; Col. 4, lines 11-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the expandable housing portion of Hopkins to employ any well-known tubular braids doing so would have provided a means to reinforce the expandable housing portion. Further the teachings of Kelley teach the use of braids in varying braid pick counts vary the flexibility of the tubing (Col. 1, lines 40-67 and Col. 2, lines 1-15). Based on a standard dictionary definition of "flexible, Capable of being bent or flexed; capable of withstanding stress without structural injury: Pliable. "pliable" meaning, easily bent or shaped: Malleable, capable of being shaped or formed. Therefore, based on the teachings of braids of Kelley, the tubular braids of Amplatz could be adjusted to allow for expansion of the housing portion and therefore, would not interfere with the expansion of the housing portion, as one of ordinary skill in the art would know.

With respect to claim 4, Amplatz does not teach a plurality of reinforcing members. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have a plurality of reinforcing members, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). With respect to the non-woven note rejection of claim 3 above.

With respect to claim 5, Amplatz does not teach the reinforcing member extending substantially along the length of the expandable housing portion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the reinforcing member extending substantially along the length of the expandable housing portion, since it has been held that rearranging parts of an invention involves only routine skill in the art and applicant has not disclosed that having the reinforcing members extending substantially along the length of the expandable housing portion provides an advantage or solves a particular problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the reinforcing member positioned in any other arrangement of the housing portion because the housing portion would still be expandable. Therefore, it would have been an obvious matter of design consideration to modify Hopkin/Amplatz to obtain the invention as specified in claim 5.

With respect to claim 6, Amplatz teaches the reinforcing members are elongated bar-like members made from a material having a high stiffness (Col. 4, lines 11-65).

With respect to claim 7, Hopkins does not specifically disclose the elastic material selected from the group of materials which includes silicone, polyurethane, polyisoprene, and lower durometer PEBAX. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to have the elastic material selected from the group of materials which includes silicone, polyurethane, polyisoprene, and lower durometer PEBAX, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design consideration. Applicant has not disclosed that having the elastic member selected from the group of materials, which includes silicone, polyurethane, polyisoprene, and lower durometer PEBAX provides an advantage, is used for a particular purpose, or solves any stated problem. One of ordinary skill in the art furthermore would have expected Applicant's invention to perform equally well with other materials, which provide elastic properties because the housing portion would still be able to expand. Therefore, it would have been an obvious matter of design consideration to modify Hopkins/Amplatz to obtain the invention as specified in claim 7.

With respect to claim 8, note rejection of claim 7 above.

With respect to claim 9, Hopkins/Amplatz do not disclose/teach the reinforcing members loaded with a material having high radiopacity. However, Hopkins does disclose the use of radipaque bands (596, 598) providing a means so that positions of the bands relative to one another may be accurately determined. It would have been obvious to one of ordinary skill in the art to provide the reinforcing members with a material having high radiopacity doing so would have provided a means to locate the reinforcing members relative to other structures while in use as disclosed by Hopkins and the use of radiopaque bands.

With respect to claims 43, 49, and 50, note rejection of claim 5 above.

With respect to claim 44, note rejection of claim 6 above.

With respect to claims 45, 46, and 48, note rejection of claim 7 above.

With respect to claim 47, note rejection of claim 9 above.

With respect to claim 51, the reinforcing members of Amplatz are fully capable of helping to bias the expandable housing portion in the contracted position based on the pitch and pick used (Col. 4, lines 10-65).

### Response to Arguments

Applicant's arguments filed 6/19/06 have been fully considered but they are not persuasive. First with respect to the 112 first paragraph and the new matter of "non-woven" limitations previously presented. The examiner on page 13, of the previous office action stated, "....while applicant list materials in the specification for the reinforcing member, which may be non-woven, there is nothing in the specification which states the reinforcing members are non-woven, therefore this limitation is considered new matter. While a list of material may be non-woven, unless stated that the materials are non-woven, does not mean the materials are non-woven. Therefore the applicant needs to provide some evidence that the list of materials are non-woven. The 112 first paragraph rejection is being maintained by the examiner. As to the arguments that the Hopkins with Amplatz or Kelley patent works against the desired radial expandability of the housing, applicant is directed back to claim 3 above and Col. 4, lines 10-65 which teach NiTi which are very elastic they are said to be super elastic therefore does meet the limitations of the claim of providing column strength to the

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With respect to claim 10, note rejection of claim 7 above.

With respect to claims 11-13, note rejection of claim 5 above.

With respect to claim 20, Hopkins discloses an expandable housing portion (594) that includes a low expansion section with at least one expansion member (590) disposed within the low expansion section to provide the elasticity needed to move the housing portion between the contracted position and expanded position. ("low expansion section" is being considered by the examiner as a relative phrase, which the specification does not clearly define as to what constitutes a "low expansion section"). Also based on the teachings of Amplatz and the pitch and pick of the braid being adjusted as desired for a particular application it would have been obvious to one of ordinary skill in the art to have low expansion sections.

With respect to claim 21, note rejection of claim 4 above.

With respect to claim 22, note rejection of claim 9 above.

With respect to claims 23 and 24, note rejection of claim 7 above.

With respect to claim 25, note rejection of claim 4 above.

With respect to claim 26, Amplatz teaches reinforcing members (Col. 3, lines 39-57) which are fully capable of preventing the low expansion sections from tearing as the expandable housing portion expands from the contracted position to the expanded position because the reinforcing members provide strength which allowing for expansion.

With respect to claim 41, note rejection of claim 3 above.

With respect to claim 42, note rejection of claim 4 above.

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housing portion but not interfering with the expansion or contraction of the housing portion.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teena Mitchell whose telephone number is (571) 272-4798. The examiner can normally be reached on Monday-Friday however the examiner is on a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jam Tuttle Teena Mitchell Primary Examiner Art Unit 3743 September 3, 2006 Page 10

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